

Work Order ID 55489

January 19, 2010 1:35:17 PM

Page 1

Item ID: D3564-3

Accept

Setup Start

Revision ID:

Stop

Item Name: Wearshoe

Start Date: 1/19/10 Start Qty: 10.00

Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 10.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 10-1-19

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D3564

Rev D

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3564 ***** (D3564-1F) ***** Dwg Rev: D Prog

Rev: D 2-Deburr if necessary

HB 10-1-25

(11)

304.063

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

HB 10-1-25

120

0.00



QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

⇒ 8/10/165

(+11)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55489

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Page 2

Item ID: D3564-3

Revision ID:

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Start Date: 1/19/10 Start Qty: 10.00

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Brake NC

Brake NC

NC BRAKE

Memo

Deburr if necessary Form on Brake as per Dwg D3564 using Jigs DT8179 and DT8155 Form Joggle as per Dwg D3564 on brake using Jig DT8157

0.00

0.00

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

Ensure joggle as per dwg D3429

0.00

0.00

150



Large Fab

Large Fab

Large Fab

Memo

Qty Description Batch: A/R 2059B Hardcoat
M113511 Weld hardcoat as per Dwg D3437

0.00

0.00



Setup Start

Stop

Cust Item ID:

Customer:



CP 10/02/08 11

⇒ S. 01/02/09

HL

EL 10-2-10 11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55489

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Page 3

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Cust Item ID:

Required Date: 1/25/10 Req'd Qty: 10.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

8/10/2/10

(X6)

170

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/10/2/10

(X16)

φ

180

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:

3:15pm

OVEN TEMPERATURE:

3:45pm FINISH TIME:

320°F

7/2/10 10/02/10

X11

φ

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55489

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Page 4

Item ID: D3564-3

Accept

Revision ID:

Item Name: Wearshoe

Start Date: 1/19/10

Start Qty: 10.00

Required Date: 1/25/10

Req'd Qty: 10.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC3- Inspect Part Finish

0.00

16K 10-02-11 (10)

QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location: FP-19

0.00

JH 10/02/11

Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00

~~16K 10-02-11 (11)~~ 10/02/11 JH

QC

Memo

0.00

Quality Control

ME 10-2-11

Picklist Print

January 19, 2010 1:35:21 PM

Page 1

Work Order ID: 55489



Parent Item: D3564-3



Parent Item Name: Wearshoe

Start Date: 1/19/10

Required Date: 1/25/10

Comments: IPP Rev:A New Issue 07-03-08 ec
IPP Rev:B As per Rev C 07-07-09 JLM
IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC

Start Qty: 10.00

Required Qty: 10.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date	Status
M304S16GA		Purchased	No			100	sf	257.9779	11.5789	131		



304/316 Sheet .063



1310-1-25

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

257.9778737

106860

8.0295

111924

25.1689737

112442

29.8899

113295

194.8895

113295

11

DART AEROSPACE LTD		Work Order:	55489
Description: Wearshoe		Part Number:	D3564-3
Inspection Dwg: D3564 Rev: D		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

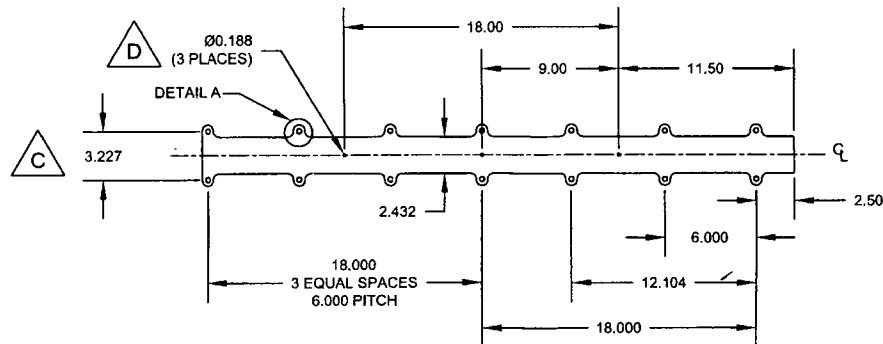
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
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2.432	+/-0.010	2.436	✓			
2.50	+/-0.030	2.50	✓			
6.000	+/-0.010	6.000	✓			
12.104	+/-0.010	12.104	✓			
18.000	+/-0.010	18.000	✓			
18.000	+/-0.010	18.000	✓			
18.00	+/-0.030	18.00	✓			
9.00	+/-0.030	9.00	✓			
11.50	+/-0.030	11.50	✓			
0.300 x 0.300	+/-0.010	303x304	✓			
Ø0.188	+0.005/-0.001	0.192	✓			
R0.375	+/-0.010	0.375	✓			
0.063	+/-0.010	0.058	✓			

Measured by:	IB
Date:	10-1-25

Audited by:	S
Date:	10/6/25

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.09.06	New Issue	KJ/JLM	
B	08.09.04	Dwg Rev updated	KJ/DD	

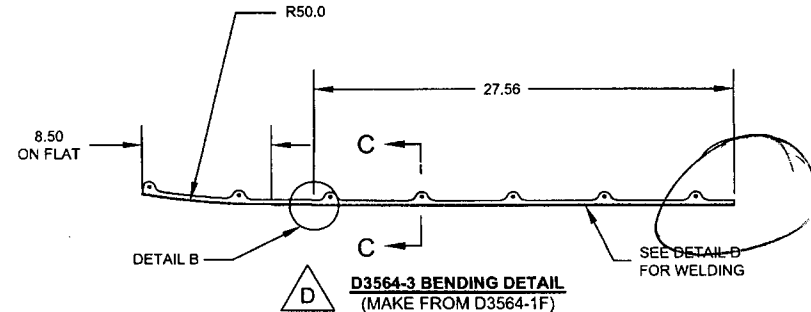
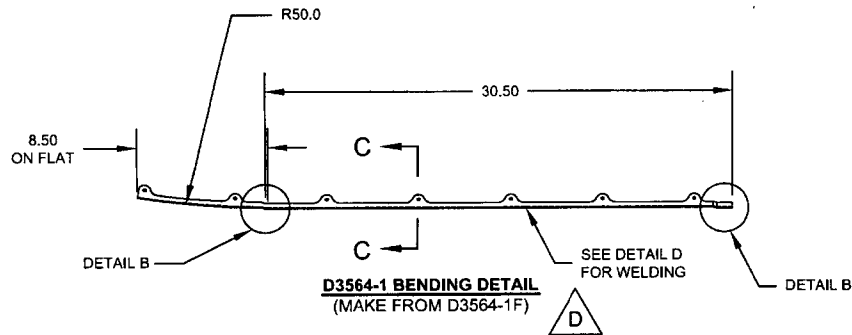


D3564-1F FLAT PATTERN

SHOP
RETURN TO
ENGINEERING
ROLLED CO
TO AMENDMEN
WORK IN PROGRESS
NO. 55489
BY 10-1-19

RELEASED

07.09.04



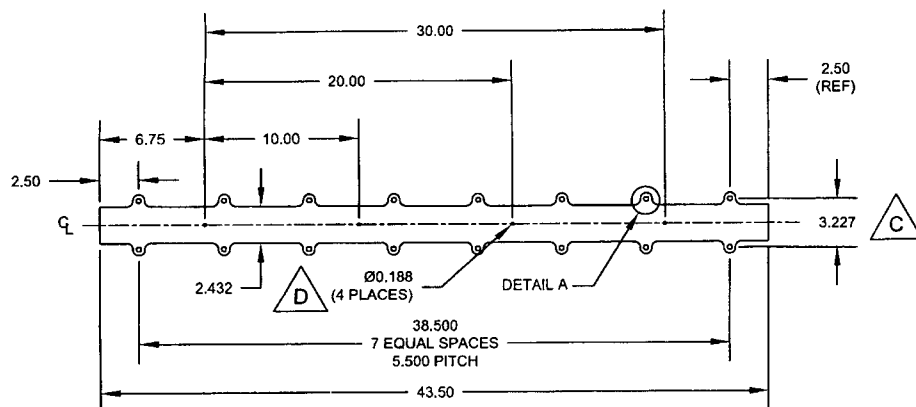
D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT C

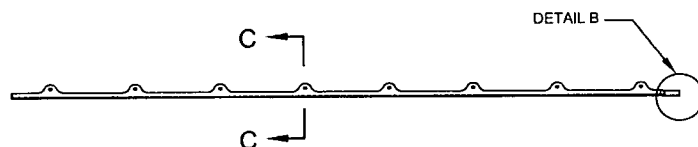
WEIGHTS:	
D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

D	UPDATE DRAWING TEMPLATE; CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7, A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7, A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5,7,B2: RELOCATE DETAILS AND SECTION; PG3 A5,7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CB		
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 1 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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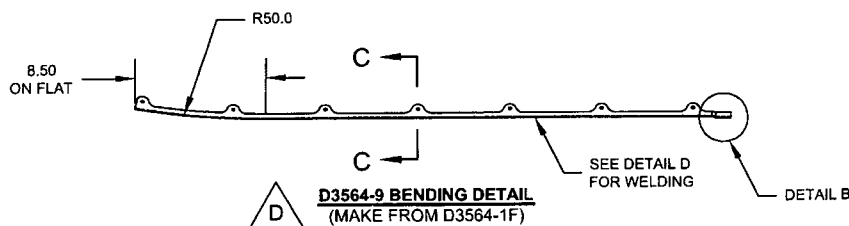
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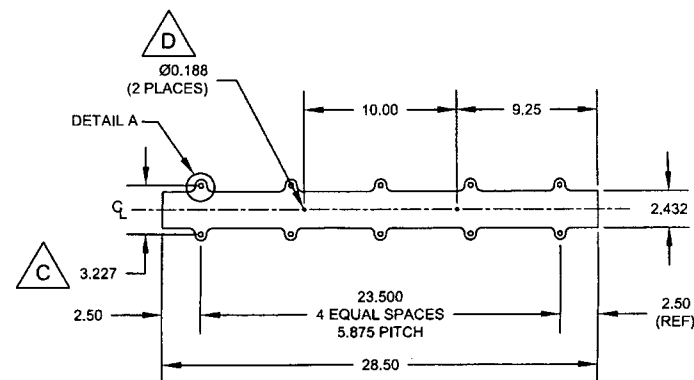
D3564-5F FLAT PATTERN



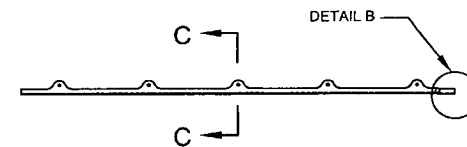
D3564-5 BENDING DETAIL
(MAKE D3564-5 FROM D3564-5F)



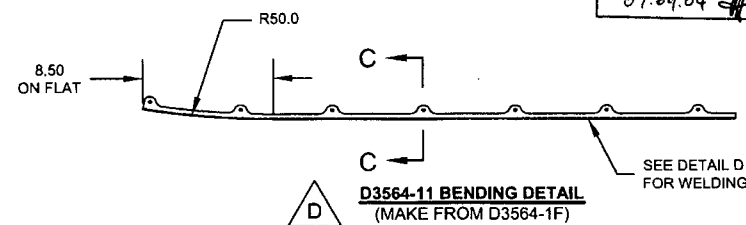
D3564-9 BENDING DETAIL
(MAKE FROM D3564-1F)



D3564-7F FLAT PATTERN



D3564-7 BENDING DETAIL
(MAKE D3564-7 FROM D3564-7F)



D3564-11 BENDING DETAIL
(MAKE FROM D3564-1F)

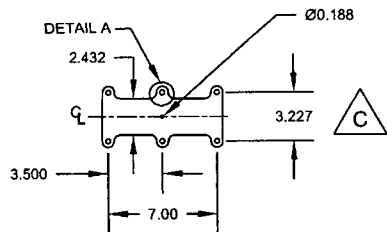
RELEASED
07.09.04

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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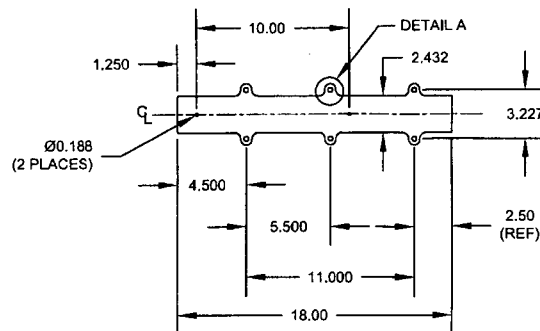
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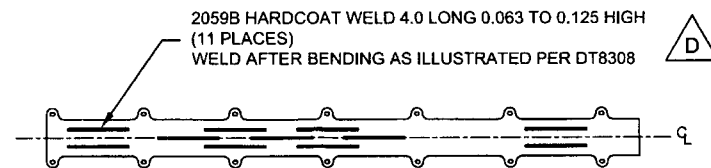
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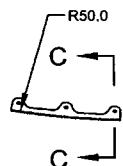
D3564-13F FLAT PATTERN



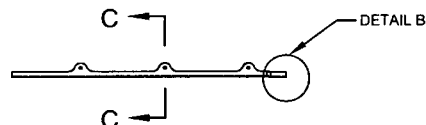
D3564-15F FLAT PATTERN



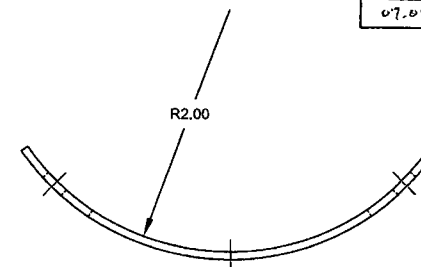
DETAIL D
(D3564-1/-3/-9/-11 WELDING DETAIL)



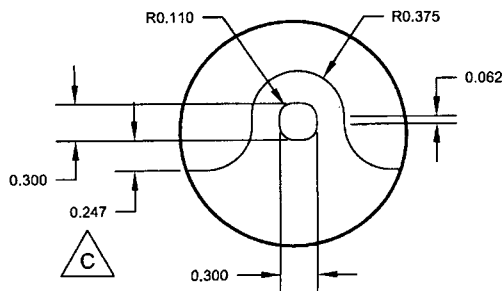
D3564-13 BENDING DETAIL
(MAKE D3564-13 FROM D3564-13F)



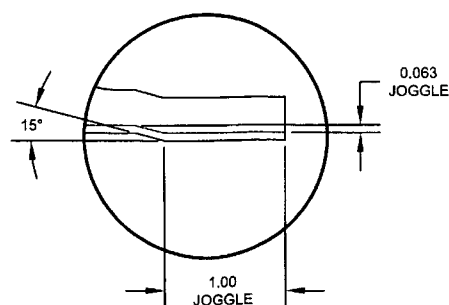
D3564-15 BENDING DETAIL
(MAKE D3564-15 FROM D3564-15F)



SECTION C-C
SCALE 1:1



DETAIL A
SCALE 1:1



DETAIL B
SCALE 1:1

RELEASED

07.09.04

W/O 55489

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
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8 7 6 5 4 3 2 1